

IN THE CLAIMS:

1. (previously amended) A method of immunizing and monitoring immunization, comprising:

- a) providing: i) a human, and ii) an immunizing preparation comprising myelin basic protein and Incomplete Freund's Adjuvant;
- b) immunizing said human with said immunizing preparation;
- c) obtaining a primary cell population from said human comprising T cells capable of secreting cytokines; and
- d) determining if said T cells are primarily Th2 cells secreting an anti-inflammatory cytokine or primarily Th1 cells secreting an inflammatory cytokine, wherein said Th2 cells secreting an anti-inflammatory cytokine indicates that said immunizing is protective against multiple sclerosis.

25. (previously amended) A method of immunizing and monitoring immunization, comprising:

- a) providing: i) a human with symptoms of multiple sclerosis, and ii) an immunizing preparation comprising myelin basic protein and Incomplete Freund's Adjuvant;
- b) immunizing said human with said immunizing preparation;
- c) obtaining a primary cell population from said human comprising T cells capable of secreting cytokines; and
- d) determining if said T cells are primarily Th2 cells secreting an anti-inflammatory cytokine or primarily Th1 cells secreting an inflammatory cytokine, wherein said Th2 cells secreting an anti-inflammatory cytokine indicates that said immunizing is effective for treating symptoms of multiple sclerosis.

26. (previously amended) A method of immunizing and monitoring immunization, comprising:

- a) providing: i) a human, and ii) an immunizing preparation comprising myelin basic protein and Incomplete Freund's Adjuvant;

- b) immunizing said human with said immunizing preparation;
- c) obtaining a primary cell population from said human comprising T cells capable of secreting cytokines;
- d) adding said primary cell population to a microwell comprising a hydrophobic membrane having a first cytokine binding ligand, under conditions such that said T cell secretes a cytokine that binds to said first cytokine binding ligand;
- e) adding a second cytokine binding ligand to said microwell under conditions such that said cytokine binding ligand binds to said cytokine; and
- f) detecting said secreted cytokine, thereby monitoring said immunizing.

27. (previously added) The method of Claim 26, wherein said detected cytokine is IL-5.

28. (previously added) The method of Claim 26, wherein said detected cytokine is IL-4.

29. (previously added) The method of Claim 26, wherein said detected cytokine is IL-10.

30. (previously added) The method of Claim 26, wherein said detected cytokine is IFN γ .

31. (previously added) The method of Claim 26, wherein said detected cytokine is IL-2.

32. (previously added) The method of Claim 26, wherein said hydrophobic membrane comprises polyvinylidene difluoride.

33. (previously added) The method of Claim 26, wherein said microwell comprises an enclosed bottom.

34. (previously added) The method of Claim 1, wherein said determining comprises detecting said secreted cytokine.

35. (previously added) The method of Claim 1, wherein said secreted cytokine is IL-5.

36. (previously added) The method of Claim 1, wherein said secreted cytokine is IL-4.

37. (previously added) The method of Claim 1, wherein said secreted cytokine is IL-10.

38. (previously added) The method of Claim 1, wherein said secreted cytokine is IFN γ .

39. (previously added) The method of Claim 1, wherein said secreted cytokine is IL-2.

40. (previously added) The method of Claim 25, wherein said determining comprises detecting said secreted cytokine.

41. (previously added) The method of Claim 25, wherein said secreted cytokine is IL-5.

42. (previously added) The method of Claim 25, wherein said secreted cytokine is IL-4.

43. (previously added) The method of Claim 25, wherein said secreted cytokine is IL-10.

44. (previously added) The method of Claim 25, wherein said secreted cytokine is IFN γ .

45. (previously added) The method of Claim 25, wherein said secreted cytokine is IL-2.